



FLOYD COUNTY SCHOOLS' CURRICULUM RESOURCES
"Building a Better Future for Every Child - Every Day!"
Summer 2012

Subject Content: _____ Science _____ Grade _____ 4th _____



Indicates the Curriculum Map

Weeks 1 – 3	Weeks 4 – 6
<p align="center">Unit/Topic Biological Science Unity and Diversity</p>	<p align="center">Unit/Topic Biological Science Unity and Diversity</p>
<p align="center">CORE CONTENT 4.1</p> <p>SC-04-3.4.1 Students will compare the different structures and functions of plants and animals that contribute to the growth, survival and reproduction of the organisms.</p> <p>Students will make inferences about the relationship between structure and function in organisms.</p> <p>Each plant or animal has structures that serve different functions in growth, survival and reproduction. For example, humans have distinct body structures for walking, holding, seeing and talking. Evidence about the relationship between structure and function should be used to make inferences and draw conclusions.</p> <p align="center">DOK 3</p> <p>SC-04-3.4.2 Students will understand that things in the environment are classified as living, nonliving and once living. Living things differ from nonliving things. Organisms are classified into groups by using various characteristics (e.g., body coverings, body structures).</p>	<p align="center">CORE CONTENT 4.1</p> <p>SC-04-3.4.3 Students will compare a variety of life cycles of plants and animals in order to classify and make inferences about an organism.</p> <p>Plants and animals have life cycles that include the beginning of life, growth and development, reproduction and death. The details of a life cycle are different for different organisms. Models of organisms' life cycles should be used to classify and make inferences about an organism.</p> <p align="center">DOK 3</p> <p>SC-04-3.4.4 Students will identify some characteristics of organisms that are inherited from the parents and others that are learned from interactions with the environment.</p> <p>Observations of plants and animals yield the conclusion that organisms closely resemble their parents at some time in their life cycle. Some</p>

characteristics (e.g., the color of flowers, the number of appendages) are passed to offspring. Other characteristics are learned from interactions with the environment, such as the ability to ride a bicycle, and these cannot be passed on to the next generation. Explorations related to inherited versus learned characteristics should offer opportunities to collect data and draw conclusions about various groups of organisms.

DOK 2

CURRICULUM			CURRICULUM		
Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
<p>Basic structures and related functions of plants and animals Plant and animal life cycles</p>	<p style="text-align: center;">Living and Non-living Organisms</p>		<p>Basic structures and related functions of plants and animals Plant and animal life cycles</p>		
<p>I CAN STATEMENTS: I can compare the different structures and functions of plants that contribute to the growth, survival and reproduction of organisms.</p> <p>I can make inferences about the relationship between structure and function in plants.</p>	<p>I CAN STATEMENTS: I can classify organisms into groups as living, nonliving, and once living.</p> <p>I explain how living things differ from nonliving things.</p> <p>I can classify organisms into groups by using various characteristics.</p>	<p>I CAN STATEMENTS:</p>	<p>I CAN STATEMENTS: I can illustrate and explain the life cycle of a plant.</p> <p>I can illustrate and explain that the details of a life cycle are different for different</p>	<p>I CAN STATEMENTS: I can identify characteristics of organisms that are inherited from parents.</p> <p>I can draw conclusions about various groups of</p>	<p>I CAN STATEMENTS:</p>

<p>I can compare the different structures and functions of animals that contribute to the growth, survival and reproduction of organisms.</p> <p>I can make inferences about the relationship between structure and function in animals.</p>			<p>organisms.</p> <p>I can make inferences about animals based on their different life cycles.</p> <p>I can illustrate and explain the life cycle of an organism that goes through metamorphosis.</p>	<p>organisms based on inherited traits.</p> <p>I can identify behaviors that are learned from interactions with the environment.</p> <p>I can draw conclusions about various groups of organisms based on learned behaviors.</p>	
<p>Critical Vocabulary</p> <p>Inferences Organism Reproduction Survival Development Functions Adaptations Sprout Germination Pollination Stamen Pistil Ovaries Death Invertebrates Vertebrates</p>	<p>Critical Vocabulary</p> <p>Classify Organisms Classification Similarities Differences Living Non-living Once living Characteristics Environment Body coverings Body structures Warm-blooded Cold-blooded Invertebrates Vertebrates Nonvascular plants Vascular plants</p>	<p>Critical Vocabulary</p>	<p>Critical Vocabulary</p> <p>Metamorphosis Beginning, growth, development, and death Reproduction Life Cycle Spout Germination</p>	<p>Critical Vocabulary</p> <p>Learned behavior Life cycle Interactions Offspring Characteristics</p>	<p>Critical Vocabulary</p>

Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities
Textbooks lab activities Research Exploration activities using Magiscope.	Textbook Activities Research Exploration activities using Magiscope.	Textbook Activities Research Exploration activities using Magiscope.	Textbooks lab activities Research Exploration activities using Magiscope.	Textbooks SciFiles (NASA) "The Case of the Prizewinning Plants" SciFiles (NASA) "The Case of the Zany Animal Antics"	Textbooks SciFiles (NASA) "The Case of the Prizewinning Plants" SciFiles (NASA) "The Case of the Zany Animal Antics"
Balanced Assessment: Formative	Balanced Assessment: Formative	Balanced Assessment: Formative	Balanced Assessment: Formative	Balanced Assessment: Formative	Balanced Assessment: Formative
Thumbs up Oral questioning Quiz Exit slip Reflection slip Discovery ed. probe	Thumbs up Oral questioning Quiz Exit slip Reflection slip Discovery ed. probe	Thumbs up Oral questioning Quiz Exit slip Reflection slip Discovery ed. probe	Thumbs up Oral questioning Quiz Exit slip Reflection slip Discovery ed. probe	Thumbs up Oral questioning Quiz Exit slip Reflection slip Discovery ed. probe	Thumbs up Oral questioning Quiz Exit slip Reflection slip Discovery ed. probe
Summative	Summative	Summative	Summative	Summative	Summative
Open Response End of unit test Culminating Performance	Open Response End of unit test Culminating Performance	Open Response End of unit test Culminating Performance	Open Response End of unit test Culminating Performance	Open Response End of unit test Culminating Performance	Open Response End of unit test Culminating Performance
Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts..)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts..)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts..)	Common (PLC Teams will design the common assessments, i.e.,	Common (PLC Teams will design the common assessments, i.e.,	Common (PLC Teams will design the common assessments, i.e.,

			grade level, and/or depts..)	grade level, and/or depts..)	grade level, and/or depts..)
Resources Needed www.globe.gov www.urbanext.uiuc.edu Text Science weekly	Resources Needed www.scienceexplosion.com	Resources Needed	Resources Needed	Resources Needed	Resources Needed

Weeks 7-9	Weeks 10-12
Unit/Topic	Unit/Topic
<p style="text-align: center;">In this section IDENTIFY CORE CONTENT 4.1 Common Core Standards</p> <p>SC-04-4.6.2 Students will analyze data/evidence of the Sun providing light and heat to earth; use data/evidence to substantiate the conclusion that the Sun’s light and heat are necessary to sustaining life on Earth. Simple observations, experiments and data collection begin to reveal that the Sun provides the light and heat necessary to maintain the temperature of Earth. Evidence collected and analyzed should be used to substantiate the</p>	<p style="text-align: center;">In this section IDENTIFY CORE CONTENT 4.1 Common Core Standards</p> <p>increase or decrease in numbers of a particular organism should be explored in order to discover patterns and resulting cause and effect relationships between organisms and their environments (e.g., structures and behaviors that make an organism suited to a particular environment). Connections and conclusions should be made based on the data.</p> <p>DOK 3 SC-04-3.5.1 Students will use representations of fossils to: draw conclusions about the nature of the organisms and the basic environments that existed at the time; make inferences about the relationships to organisms that are alive today. Fossils found in Earth materials provide evidence about organisms that lived</p>

conclusion that the sun's light and heat are necessary to sustain life on Earth.

DOK 3

long ago and the nature of the environment at that time. Representations of fossils provide the basis for describing and drawing conclusions about the organisms and basic environments represented by them.

DOK 3

CURRICULUM

CURRICULUM

Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
<p>Identify Sub-Topics</p> <p>Relationships of plants and animals (Ecosystems) Sun providing light and heat to the Earth</p>	<p>Identify Sub-Topics</p>	<p>Identify Sub-Topics</p>	<p>Identify Sub-Topics</p> <p>Cause and effect relationships between organisms and environments Fossils</p>	<p>Identify Sub-Topics</p>	<p>Identify Sub-Topics</p>
<p>I CAN STATEMENTS:</p> <p>I can analyze patterns and make generalizations about the basic relationships of plants in an ecosystem.</p> <p>I can analyze patterns and make generalizations about</p>	<p>I CAN STATEMENTS:</p> <p>I can analyze data of the Sun providing light and heat to Earth.</p> <p>I can use data / observations to prove that the sun's light and heat are necessary to</p>	<p>I CAN STATEMENTS:</p>	<p>I CAN STATEMENTS:</p> <p>I can make predictions related to the survival of organisms in particular environments.</p> <p>I can make inferences based on evidence related to reproductive success of organisms in environments.</p>	<p>I CAN STATEMENTS:</p> <p>I can draw conclusions about the nature of the organisms and the basic environments that existed at that time.</p> <p>I can make inferences about the relationships to</p>	<p>I CAN STATEMENTS:</p>

<p>I can analyze the basic relationships of animals in an ecosystem.</p> <p>I can classify animals based on what they eat.</p> <p>I can classify organisms based on their energy source.</p>	<p>sustain life on Earth.</p>			<p>organisms that are alive today.</p>	
<p>Critical Vocabulary</p> <p>Food Chain Ecosystem Chlorophyll Photosynthesis Herbivore Carnivore Omnivore Producer Consumer Scavenger Decomposers</p>	<p>Critical Vocabulary</p> <p>Solar energy Sun Light Radiation</p>	<p>Critical Vocabulary</p>	<p>Critical Vocabulary</p> <p>Migration Environment Hibernation Survival Predator Prey Adaptation Mimicry</p>	<p>Critical Vocabulary</p> <p>Fossils Evidence Extinct Environment Geologist Paleontologist</p>	<p>Critical Vocabulary</p>
<p>Suggested Strategies/Activities</p> <p>Textbooks lab activities Research Exploration activities using Magiscope.</p>	<p>Suggested Strategies/Activities</p> <p>Textbooks lab activities Research Exploration activities using Magiscope.</p>	<p>Suggested Strategies/Activities</p> <p>Textbooks lab activities Research Exploration activities using Magiscope.</p>	<p>Suggested Strategies/Activities</p> <p>Textbooks lab activities Research Exploration activities using Magiscope.</p>	<p>Suggested Strategies/Activities</p> <p>Textbooks lab activities Research Exploration activities using Magiscope.</p>	<p>Suggested Strategies/Activities</p> <p>Textbooks lab activities Research Exploration activities using Magiscope.</p>

<p align="center">Balanced Assessment: Formative</p> <p>Thumbs up Oral questioning Quiz Exit slip Reflection slip Discovery ed. probe</p> <p align="center">Summative</p> <p>Open Response End of unit test Culminating Performance</p> <p>Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts..)</p>	<p align="center">Balanced Assessment: Formative</p> <p>Thumbs up Oral questioning Quiz Exit slip Reflection slip Discovery ed. probe</p> <p align="center">Summative</p> <p>Open Response End of unit test Culminating Performance</p> <p>Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts..)</p>	<p align="center">Balanced Assessment: Formative</p> <p>Thumbs up Oral questioning Quiz Exit slip Reflection slip Discovery ed. probe</p> <p align="center">Summative</p> <p>Open Response End of unit test Culminating Performance</p> <p>Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts..)</p>	<p align="center">Balanced Assessment: Formative</p> <p>Thumbs up Oral questioning Quiz Exit slip Reflection slip Discovery ed. probe</p> <p align="center">Summative</p> <p>Open Response End of unit test Culminating Performance</p> <p>Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts..)</p>	<p align="center">Balanced Assessment: Formative</p> <p>Thumbs up Oral questioning Quiz Exit slip Reflection slip Discovery ed. probe</p> <p align="center">Summative</p> <p>Open Response End of unit test Culminating Performance</p> <p>Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts..)</p>	<p align="center">Balanced Assessment: Formative</p> <p>Thumbs up Oral questioning Quiz Exit slip Reflection slip Discovery ed. probe</p> <p align="center">Summative</p> <p>Open Response End of unit test Culminating Performance</p> <p>Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts..)</p>
<p align="center">Resources Needed</p> <p>Text United Streaming Discovery ed. videos</p>	<p align="center">Resources Needed</p>	<p align="center">Resources Needed</p>	<p align="center">Resources Needed</p> <p>Text www.fossilgug.com www.fe.doe.gov fossil samples</p>	<p align="center">Resources Needed</p>	<p align="center">Resources Needed</p>

Weeks 13-15	Weeks 16-18
Unit/Topic	Unit/Topic
<p style="text-align: center;">In this section IDENTIFY CORE CONTENT 4.1 Common Core Standards</p> <p>SC-04-2.3.1 Students will classify earth materials by the ways that they are used; explain how their properties make them useful for different purposes. Earth materials provide many of the resources humans use. The varied materials have different physical properties that can be used to describe, separate, sort and classify them. Inferences about the unique properties of the earth materials yield ideas about their usefulness. For example, some are useful as building materials (e.g., stone, clay, marble), some as sources of fuel (e.g., petroleum, natural gas), or some for growing the plants we use as food.</p> <p style="text-align: center;">DOK 2</p>	<p style="text-align: center;">In this section IDENTIFY CORE CONTENT 4.1 Common Core Standards</p> <p>SC-04-2.3.2 Students will describe and explain consequences of changes to the surface of the Earth, including some common fast changes (e.g., landslides, volcanic eruptions, earthquakes), and some common slow changes (e.g., erosion, weathering). The surface of the Earth changes. Some changes are due to slow processes such as erosion or weathering. Some changes are due to rapid processes such as landslides, volcanic eruptions and earthquakes. Analyzing the changes to identify cause and effect relationships helps to define and understand the consequences.</p> <p style="text-align: center;">DOK 3</p> <p>SC-04-2.3.3 Students will make generalizations and/or predictions about weather changes from day to day and over seasons based on weather data. Weather changes from day to day and over seasons. Weather can be described by observations and measurable quantities such as temperature, wind direction, wind speed and precipitation. Data can be displayed and used to make predictions.</p> <p style="text-align: center;">DOK 3</p>

<p>Quiz Exit slip Reflection slip Discovery ed. probe</p> <p style="text-align: center;">Summative</p> <p>Open Response End of unit test Culminating Performance</p> <p>Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts..)</p>	<p>Quiz Exit slip Reflection slip Discovery ed. probe</p> <p style="text-align: center;">Summative</p> <p>Open Response End of unit test Culminating Performance</p> <p>Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts..)</p>	<p>Quiz Exit slip Reflection slip Discovery ed. probe</p> <p style="text-align: center;">Summative</p> <p>Open Response End of unit test Culminating Performance</p> <p>Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts..)</p>	<p>Quiz Exit slip Reflection slip Discovery ed. probe</p> <p style="text-align: center;">Summative</p> <p>Open Response End of unit test Culminating Performance</p> <p>Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts..)</p>	<p>Quiz Exit slip Reflection slip Discovery ed. probe</p> <p style="text-align: center;">Summative</p> <p>Open Response End of unit test Culminating Performance</p> <p>Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts..)</p>	<p>Quiz Exit slip Reflection slip Discovery ed. probe</p> <p style="text-align: center;">Summative</p> <p>Open Response End of unit test Culminating Performance</p> <p>Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts..)</p>
<p style="text-align: center;">Resources Needed</p> <p>www.learner.org www.rocsforkids.com Textbook</p>	<p style="text-align: center;">Resources Needed</p>	<p style="text-align: center;">Resources Needed</p>	<p style="text-align: center;">Resources Needed</p>	<p style="text-align: center;">Resources Needed</p>	<p style="text-align: center;">Resources Needed</p>

Weeks 19-21	Weeks 22-24
Unit/Topic	Unit/Topic

Physical Science – Structure and Transformation of Matter Earth/Space Science – The Earth and the Universe	Earth/Space Science – The Earth and the Universe Unifying Concepts – Unity and Diversity
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**In this section IDENTIFY
CORE CONTENT 4.1
Common Core Standards**

SC-04-1.1.1
 Students will explain how matter, including water, can be changed from one state to another. Materials can exist in different states--solid, liquid and gas. Some common materials, such as water, can be changed from one state to another by heating or cooling. Resulting cause and effect relationships should be explored, described and predicted.
DOK 3

SC-04-2.3.4
 Students will identify patterns, recognize relationships and draw conclusions about the Earth-Sun system by interpreting a variety of representations/models (e.g., diagrams, sundials, distance of sun above horizon) of the sun’s apparent movement in the sky. Changes in movement of objects in the sky have patterns that can be observed, described and modeled. The Sun appears to move across the sky in the same way every day, but the Sun’s apparent path changes slowly over seasons. Data collected can be used to identify patterns, recognize relationships and draw conclusions about the Earth and Sun system.
DOK 3

**In this section IDENTIFY
CORE CONTENT 4.1
Common Core Standards**

SC-04-2.3.5
 Students will understand that the moon appears to move across the sky on a daily basis much like the Sun. The observable shape of the moon can be described as it changes from day to day in a cycle that lasts about a month.

Light can be observed as traveling in a straight line until it strikes an object. Light can be reflected by a shiny object (e.g., mirror, spoon), refracted by a lens (e.g., magnifying glass, eyeglasses), or absorbed by an object (e.g., dark surface).
DOK 3

CURRICULUM			CURRICULUM		
Week 19	Week 20	Week 21	Week 22	Week 23	Week 24
Classifying objects by their properties Water Cycle	Movement and patterns of the sun		Movement of the moon Traveling of Light		

<p>I CAN STATEMENTS:</p> <p>I can predict how matter changes from one state to another.</p> <p>I can explain how matter changes from one state to another by heating or cooling</p>	<p>I CAN STATEMENTS:</p> <p>I can identify patterns of the sun’s apparent movement in the sky.</p> <p>I can recognize relationships about the Earth-Sun system regarding the sun’s apparent movement in the sky.</p> <p>I can observe, describe and model changes in movement of objects in the sky.</p> <p>I can explain why the Sun’s apparent path changes slowly over the seasons.</p> <p>I can use data to draw conclusions about the Earth and Sun system. I can explain the phases of the moon as it goes through its cycle.</p> <p>I can predict the location of the sun based upon a shadow.</p>	<p>I CAN STATEMENTS:</p>	<p>I CAN STATEMENTS:</p>	<p>I CAN STATEMENTS:</p> <p>I can examine models of light in order to understand the behavior of light.</p> <p>I can describe and demonstrate the path of light as it strikes a variety of surfaces.</p> <p>I can explain how light travels.</p>	<p>I CAN STATEMENTS:</p>
<p>Critical Vocabulary</p> <p>Water cycle Solid, liquid, gas Evaporation</p>	<p>Critical Vocabulary</p> <p>Orbit Eclipse Earth-Sun System</p>	<p>Critical Vocabulary</p>	<p>Critical Vocabulary</p>	<p>Critical Vocabulary</p> <p>Reflection Refraction Absorption</p>	<p>Critical Vocabulary</p>

Performance	Performance	Performance	Performance	Performance	Performance
Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts..)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts..)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts..)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts..)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts..)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts..)
Resources Needed	Resources Needed	Resources Needed	Resources Needed	Resources Needed	Resources Needed
Textbook United Streaming Discovery Educations videos www.eaae-astronomy.org					

Weeks 25-27	Weeks 28-30
Unit/Topic	Unit/Topic
<p style="text-align: center;">In this section IDENTIFY CORE CONTENT 4.1 Common Core Standards</p> <p>SC-04-1.2.3 Students will:</p> <ul style="list-style-type: none"> • explain that sound is a result of vibrations, a type of motion; • describe pitch (high, low) as a difference in sounds that are 	<p style="text-align: center;">In this section IDENTIFY CORE CONTENT 4.1 Common Core Standards</p> <p>SC-04-1.2.2 Students will infer causes and effects of pushes and pulls (forces) on objects based on representations or interpretations of straight-line movement/motion in charts, graphs and qualitative comparisons.</p>

produced and relate that to the rate of vibration.

Vibration is a type of motion that can be observed, described, measured and compared. Sound is produced by vibrating objects. The pitch of the sound can be varied by changing the rate of vibration. The relationship between rates of vibration and produced sounds can be described and graphed.

DOK 3
SC-04-1.2.1
 Students will interpret or represent data related to an object's straight-line motion in order to make inferences and predictions of changes in position and/or time.
 An object's motion can be described by measuring its change in position over time such as rolling different objects (e.g., spheres, toy cars) down a ramp. Collecting and representing data related to an object's motion provides the opportunity to make comparisons and draw conclusions.

DOK 3

The position and motion of objects can be changed by pushing or pulling. The amount of change is related to the force (defined as the strength of the push or pull) and the mass of the object(s) used. The force with which a ball is hit illustrates this principle. Cause and effect relationships, along with predicted consequences related to the strength of pushes and pulls (force) on an object's position and motion should be explored and qualitatively compared.

DOK 3

CURRICULUM			CURRICULUM		
Week 25	Week 26	Week 27	Week 28	Week 29	Week 30
Position and motion of objects Changes in position and motion Interactions of magnets with other magnets and matter			Motion of an object (change in position)		

<p>I CAN STATEMENTS:</p> <p>I can explain and demonstrate that sound is a result of vibration.</p> <p>I can describe and demonstrate pitch as a difference in sounds related to the rate of vibration.</p>	<p>I CAN STATEMENTS:</p> <p>I can measure an objects change in position over time.</p> <p>I can collect and interpret data related to an object's motion .</p> <p>I can make comparisons and predictions about the change in position of various objects.</p> <p>I can infer causes and effects of force on objects.</p> <p>I can demonstrate that the position and motion of objects can be</p> <p>changed by pushing or pulling.</p> <p>I can demonstrate how simple machines make work easier.</p>	<p>I CAN STATEMENTS:</p>	<p>I CAN STATEMENTS:</p>	<p>I CAN STATEMENTS:</p>	<p>I CAN STATEMENTS:</p>
<p>Critical Vocabulary</p>	<p>Critical Vocabulary</p> <p>Motion Predict Force (push, pull) Position Qualitative Straight-line motion Work</p>	<p>Critical Vocabulary</p>	<p>Critical Vocabulary</p>	<p>Critical Vocabulary</p>	<p>Critical Vocabulary</p>

Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts..)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts..)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts..)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts..)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts..)	<i>Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts..)</i>
Resources Needed	Resources Needed	Resources Needed	Resources Needed	Resources Needed	Resources Needed
United Streaming AIMS workbook Textbooks www.learningscience.org www.physics4kids.com					

Weeks 31-33	Weeks 34-36
Unit/Topic	Unit/Topic
<p style="text-align: center;">In this section IDENTIFY CORE CONTENT 4.1 Common Core Standards</p> <p>SC-04-4.6.3 Students will evaluate a variety of models/representations of electrical circuits (open, closed, series, and/or parallel) to:</p> <ul style="list-style-type: none"> • make predictions related to changes in the system; • compare the properties of conducting and non-conducting materials. <p>Electricity in circuits can produce light, heat and sound. Electrical circuits require a complete conducting path through which an electrical current can</p>	<p style="text-align: center;">In this section IDENTIFY CORE CONTENT 4.1 Common Core Standards</p> <p>Students will</p> <ul style="list-style-type: none"> • describe human interaction in the environment where they live • classify the interaction as beneficial or harmful to the environment using <p>data/evidence to support conclusions All organisms, including humans, cause changes in the environment where</p>

pass. Analysis of a variety of circuit models creates an opportunity to make predictions about circuits, as well as to demonstrate an understanding of the concepts of open and closed circuits and basic conducting and nonconducting materials.

DOK 3

SC-04-4.6.5

Students will identify ways that heat can be produced (eg. Burning, rubbing) and properties of materials that conduct heat better than others
 Students will describe the movement of heat between objects
 Heat can be produced in many ways such as burning or rubbing. Heat moves from a warmer object to a cooler one by contact (conduction) or at a distance. Some materials absorb and conduct heat better than others. Simple investigations can illustrate that metal objects conduct heat better than wooden objects.

DOK 2

they live. Some of these changes are detrimental to the organism or to other organisms; other changes are beneficial (e.g., dams benefit some aquatic organisms but are detrimental to others). By evaluating the consequences of change using cause and effect relationships, solutions to real life situations/dilemmas can be proposed.

DOK 3

CURRICULUM			CURRICULUM		
Week 31	Week 32	Week 33	Week 34	Week 35	Week 36
Magnets Electrical Circuits	Conduction Convection		Human Interactions	Pollution (harmful/beneficial)	
I CAN STATEMENTS: I can recognize that magnets have two poles.	I CAN STATEMENTS: I can identify ways heat can be produced	I CAN STATEMENTS:	I CAN STATEMENTS: I can explain how people interact in their	I CAN STATEMENTS: I can classify human interactions as beneficial	I CAN STATEMENTS:

<p>I can describe how magnets attract and repel each other.</p> <p>I can make a model of an open and closed electrical circuit.</p> <p>I can make a model of a series and parallel electrical circuit.</p> <p>I can make predictions related to changes in an electrical circuit.</p> <p>I can compare the properties of conducting and nonconducting materials.</p>	<p>I can identify properties that conduct heat better than others</p> <p>I can describe the movement of heat between objects</p>		<p>environment.</p>	<p>or harmful to the environment.</p>	
<p>Critical Vocabulary</p> <p>Magnet Attract Repel Magnetic Pole Electromagnet Static Electricity Electrical Circuit Open/Closed Circuit Parallel Circuit Series Circuit Conductor</p>	<p>Critical Vocabulary</p> <p>Conduction Convection Radiation Conduct</p>	<p>Critical Vocabulary</p>	<p>Critical Vocabulary</p> <p>Ecosystem Conservation Recycle Pollution</p>	<p>Critical Vocabulary</p>	<p>Critical Vocabulary</p>

Insulator Switch					
Suggested Strategies/Activities Textbooks lab activities Research Exploration activities	Suggested Strategies/Activities Textbooks lab activities Research Exploration activities	Suggested Strategies/Activities Textbooks lab activities Research Exploration activities	Suggested Strategies/Activities Textbooks lab activities Research Exploration activities	Suggested Strategies/Activities Textbooks lab activities Research Exploration activities	Suggested Strategies/Activities Textbooks lab activities Research Exploration activities
Balanced Assessment: Formative Thumbs up Oral questioning Quiz Exit slip Reflection slip Discovery ed. probe	Balanced Assessment: Formative Thumbs up Oral questioning Quiz Exit slip Reflection slip Discovery ed. probe	Balanced Assessment: Formative Thumbs up Oral questioning Quiz Exit slip Reflection slip Discovery ed. probe	Balanced Assessment: Formative Thumbs up Oral questioning Quiz Exit slip Reflection slip Discovery ed. probe	Balanced Assessment: Formative Thumbs up Oral questioning Quiz Exit slip Reflection slip Discovery ed. probe	Balanced Assessment: Formative Thumbs up Oral questioning Quiz Exit slip Reflection slip Discovery ed. probe
Summative Open Response End of unit test Culminating Performance	Summative Open Response End of unit test Culminating Performance	Summative Open Response End of unit test Culminating Performance	Summative Open Response End of unit test Culminating Performance	Summative Open Response End of unit test Culminating Performance	Summative Open Response End of unit test Culminating Performance
Common (PLC Teams will design the common	Common (PLC Teams will design the	Common (PLC Teams	Common (PLC Teams will design the common	Common (PLC Teams will design the common	Common (PLC Teams will design the

assessments, i.e., grade level, and/or depts..)	common assessments, i.e., grade level, and/or depts..)	will design the common assessments, i.e., grade level, and/or depts..)	assessments, i.e., grade level, and/or depts..)	assessments, i.e., grade level, and/or depts..)	common assessments, i.e., grade level, and/or depts..)
<p align="center">Resources Needed</p> <p>United Streaming www.howmagnetwork.com www.coolmagnetman.com www.brainpopJr.com Discovery video clips</p>	<p align="center">Resources Needed</p>	<p align="center">Resources Needed</p>	<p align="center">Resources Needed</p>	<p align="center">Resources Needed</p>	<p align="center">Resources Needed</p>